

How to Transcribe Audio Files with OpenAI's Whisper

How to Transcribe Audio Files with OpenAI's Whisper

This guide provides a general walkthrough on using the command-line interface (CLI) for OpenAI's Whisper to automatically transcribe audio files.

1. Installation

First, you need to have Python and `pip` (the Python package installer) on your system. If you do, you can install `whisper` by running the following command in your terminal:

```
pip install -U openai-whisper
```

2. Basic Transcription

The simplest way to use `whisper` is to provide the path to your audio file.

```
whisper "path/to/your/audio.wav"
```

Whisper will process the audio and save the transcription files (`.txt`, `.vtt`, and `.srt`) in the current directory.

3. Handling File Paths with Spaces

If your file path contains spaces, you must wrap the path in double quotes (`"`) or escape each space with a backslash (`\`).

Using Quotes (Recommended):

```
whisper "path/with a space/to/your/audio.wav"
```

Using Backslashes:

```
whisper path/with\ a\ space/to/your/audio.wav
```

4. Choosing a Model (Managing Resources)

Whisper offers several models with varying sizes and resource requirements. The default model can be memory-intensive. If you encounter errors like `Killed` or have limited RAM, using a smaller model is recommended.

The available models are `tiny`, `base`, `small`, `medium`, and `large`.

To use a specific model, use the `--model` flag:

```
whisper --model base "path/to/your/audio.wav"
```

The `base` model is a good balance of speed and accuracy for general use and is much less demanding than the default model.

5. Specifying an Output Directory

By default, `whisper` saves the transcription files in the directory where you run the command. To save them in a different location, such as the same directory as the audio file, use the `--output_dir` flag.

```
whisper --output_dir "path/to/save/transcripts/" "path/to/your/audio.wav"
```

Putting It All Together: A Complete Example

Here is a complete command that uses the `base` model and saves the output to the same directory as the source audio file, correctly handling spaces in the file path:

```
whisper --model base --output_dir "path/to/your/audio folder/"  
"path/to/your/audio folder/audio.wav"
```

This will create the following files inside `"path/to/your/audio folder/"`:

- `audio.txt` (plain text transcript)
- `audio.vtt` (subtitle format)
- `audio.srt` (subtitle format)

By following these steps, you can reliably transcribe audio files from your terminal using `whisper`.